

Patients Characteristics (N = 18)

Sex: Male/Female	10/8
Median Age (years)	50 (range: 32–62)
Race	
Caucasians	15
African Americans	3
Diagnosis	
APL	1
HD	1
NHL	8
MM	8
Median CD34+ Cells/kg	7.57 million
	(range: 2.93–76.16)

APL: Acute Promyelocytic Leukemia, HD: Hodgkin Disease, MM: Multiple Myeloma, NHL: Non-Hodgkin Lymphoma.

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TOTAL BODY IRRADIATION BASED (TBI) VERSUS CHEMOTHERAPY-BASED-PREPARATIVE REGIMENS BEFORE AUTOLOGOUS STEM CELL TRANSPLANTS FOR NON-HODGKIN'S LYMPHOMA

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Objectives: The optimum high dose preparative regimen for non-Hodgkin lymphoma (NHL) patients undergoing autologous stem cell transplantation (ASCT) is unknown. We compared the radiation-based regimen of cyclophosphamide, etoposide and 12 Gy total body irradiation (CY/E/TBI) to carmustine, etoposide, cytarabine and melphalan (BEAM) in NHL patients who received ASCT. We investigated acute and long-term toxicities, disease free survival (DFS), overall survival (OS) of these two regimens. **Methods:** Historical cohort study was performed at a provincial cancer centre. Cause specific survival was determined with the Kaplan-Meier method. Survival between groups was compared using the log-rank test. **Results:** From Mar-1991 to Sep-2005, 79 patients received CY/E/TBI (n = 32) or BEAM (n = 47). Histology was indolent in 30 and aggressive in 49 patients. Cell source was bone marrow in six and 73 received peripheral blood progenitor cells. Prior to ASCT, ten patients were in complete remission, 47 had chemo-sensitive disease and 22 had chemo-resistant disease. There were only two cases of interstitial pneumonitis, with one in each preparative regimen group. There were six transplant related deaths; two in the BEAM group and four were in TBI group. The TBI based group has a higher mean mucositis score (p = 0.03). Five year DFS was 47% and 51% in the TBI and BEAM groups, respectively (p = 0.41). Five year OS was 50% and 64% for the TBI and BEAM based groups (p = 0.07). Multivariate analyses revealed that patients with more advanced disease status and raised LDH at ASCT independently predicted inferior DFS. There was one case of acute myeloid leukemia and two of prostate cancer, all of whom were in the TBI group. **Conclusions:** As compared to a BEAM based regimen, a 12 Gy TBI-based regimen resulted in a similar DFS. The TBI group had a trend toward poorer OS than a BEAM-based regimen that may accounted for by other confounding variables. There did not appear to be excess pulmonary or other acute toxicities in the TBI based group. Randomized controlled trials are required in order to establish the superiority of either regimen.

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HEMATOPOIETIC STEM CELL TRANSPLANTATION (SCT): A SINGLE CENTER EXPERIENCE IN COLOMBIA

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Here we report the results of autologous and allogenic SCT in a single institution in Bogotá, Colombia, between 1993 and 2007. We performed 532 SCT in 526 patients, 227 allogenic and 305 autologous.

In 294 (96.4%) of autologous-SCT, stem cells were obtained from peripheral blood. Mean $2.97 \times 10^6/\text{kg}$ (0.31–30) CD34+ cells, in 3 (1–8) apheresis, were collected. 224 (73.7%) were mobilized using Cyclofosfamide plus G-SCF. The rest were mobilized with various chemotherapy regimens or G-CSF alone. Indications for auto-SCT were: Non-Hodgkins Lymphoma 115, Hodgkin disease 93, multiple myeloma 59, solid tumors 18, acute leukemias 17, other 3. Mean age was 40.1 years (5–68). 189 (61.9%) were male. Most common conditioning regimens for lymphomas were BEAM and BEM. All MM patients were conditioned with Melphalan 200 mg/m². Hospitalization median time was 27 days (14–87). Day 100 TRM (transplant related mortality) was 6.23%. At mean 31.23 months (0.16–161) follow up overall and relapse free survival are 71% and 66.4% respectively. 60% of deaths were related to disease relapse.

Of 227 allo-SCT, in 214 SC were obtained from peripheral blood, only 13 were obtained from bone marrow. 153 (59%) were males. Most common indications for transplant were: Chronic myeloid leukemia 57, acute myeloid leukemia 46, acute lymphoid leukemia 41, bone marrow failure syndromes 44, Hodgkin's and non-Hodgkin lymphomas 14, MDS 9, other 12. Mean age was 30.1 (4–63) years. 72% of patients and 76% of donors were IgG CMV positive. Most common conditioning regimens for acute leukemias and lymphomas were BuCy, BuCy-etoposide, busulfan-fludarabine; and for aplastic anemia high dose cyclofosfamide or cyclophosphamide plus ATG. Hospitalization median time was 34 days (17–103). Day 100 TRM was 16.7%. At mean 25.72 months (0.27–147) follow up, overall and relapse free survival are 53.2% and 50.9% respectively.

Results described here are similar of ones reported in other centers around de world, they confirm that SCT is feasible in centers of developing world.

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PITUITARY APOPLEXY COMPLICATING AUTOLOGOUS STEM CELL TRANSPLANTATION

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Pituitary Apoplexy (PA) is an uncommon neurologic event that results from sudden hemorrhage or infarction of the pituitary gland. Most of these events occur in patients with undiagnosed pituitary adenoma. There are various precipitating causes. We report a case of PA precipitated by thrombocytopenia during autologous stem cell transplantation.

The patient is a 48M with history of stage II multiple myeloma initially treated with lenalidomide and dexamethasone. The patient then proceeded to Auto PSCT. His preparative regimen consisted of melphalan 200 mg/m². Initial lab values showed a platelet count of 429K/ul. The patient became febrile on Day 4 and was started on broad spectrum antibiotics. Voriconazole replaced fluconazole when fevers persisted. On Day 7, the patient complained of blurry vision. This was the first day plts were below 10K/ul. A possible culprit was voriconazole and it was discontinued. The patient complained his peripheral vision was particularly compromised, and bitemporal hemianopsia was confirmed. CT of the brain revealed a 2.3×2.5 cm hemorrhagic pituitary mass. Platelets were transfused to keep plts above 75K/ul. Hydrocortisone was begun, as was desmopressin, for developing diabetes insipidus. MRI confirmed a large suprasellar mass consistent with a pituitary macroadenoma that contained hemorrhage. The incidence of PA with pituitary adenoma is variable, but has been reported to be as high as 27.7%. Many patients have nonfunctional adenomas or are asymptomatic prior to the event. Clinical symptoms of PA are also variable but the most common symptoms include headache, nausea, and visual deficits. As in most cases, our patient had an undiagnosed pituitary adenoma and was asymptomatic. The thrombocytopenia and immunocompromise of PSCT can make the pituitary vulnerable to hemorrhage and abscess, both reported causes of apoplexy.